

Monographic Journals of the Near East

General Editor: Giorgio Buccellati

Afroasiatic Linguistics

Editor:

Robert Hetzron, Santa Barbara

Advisory Board:

Ariel Bloch, Berkeley

John B. Callender, Los Angeles

Talmy Givón, Los Angeles

Thomas G. Penchoen, Los Angeles

Stanislav Segert, Los Angeles

Volume 2

Issue 9

July 1975

Wāw and Digamma

and

A Suprasegmental Feature of Length in Semitic

by

A. D. Corré



Undena Publications

Malibu 1975

AFROASIATIC LINGUISTICS

AAL includes contributions in linguistics within the vast domain of Afroasiatic (Hamito-Semitic) languages. Articles of general, theoretical interest using Afroasiatic material, descriptive, historical and comparative studies are included.

Editor: Robert Hetzron (1346 San Rafael, Santa Barbara, Ca. 93109, U.S.A.)

Advisory Board: A. Bloch, J. B. Callender, T. Givón, T. G. Penchoen, S. Segert.

MONOGRAPHIC JOURNALS OF THE NEAR EAST

MJNE is a system of journals on the Near East, with each journal devoted to a specialized study area, and each issue consisting of a single article. Current journals in the system are *Afroasiatic Linguistics* and *Assur*.

General Subscription

For a prepayment of \$12.50 the subscriber selects random issues from within the entire system as desired, up to a total of 200 pages. The subscriber is also entitled to (1) periodical lists of abstracts from all journals in the system, and (2) reservation to any journal within the system, whereby issues of a given journal are sent on approval immediately upon publication (and may be returned within two weeks).

Library Subscription

A prepayment of \$12.50 for each journal in the system secures all issues of a single volume as soon as they are published. This subscription schedule does not allow the selection of random issues; in return, a discount is provided in the form of a greater number of pages for the basic price of \$12.50 (since a volume will normally include more than 200 pages).

Library subscriptions are available to both institutions and individual scholars.

Individual issues are numbered *sequentially* within each volume. Each issue has its own pagination. A volume is closed when a total of between 200 and 250 pages is reached.

A *title page* and a *table of contents* listing all issues within each volume are sent to all subscribers at the close of a volume.

Periodicity in the order of appearance of issues is not predetermined. A volume, however, is generally completed within one year.

Institutional and Professional discount of 20% on single subscriptions (higher on larger orders). Payment must accompany orders from individuals. A handling fee of 70¢ will be charged to Libraries if order is not prepaid. Order from: UNDENA PUBLICATIONS, P.O. Box 97, Malibu, California 90265, U.S.A.

© 1975 by Undena Publications.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photo-copy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

*This paper is part of the
Proceedings
of the
First North-American Conference on Semitic Linguistics
Santa Barbara, California
March 24-25, 1973*

WĀW AND DIGAMMA

Alan D. Corré

University of Wisconsin--Milwaukee

Initial *w* of Semitic became *y* in Hebrew (there are only three *w*-initial words in the Bible), yet in the Mishnaic language one finds words beginning in *w*. The hypothesis advanced here is as follows. The Greek koine had a facultative *w* at the beginning of various words, some of which were borrowed by Mishnaic Hebrew. Initial *w* became permissible again, and this rendered possible the back-formation of words beginning in *w* from "genuine" Semitic roots, although some of these may in fact be contaminated forms, influenced by similar Greek words.

From the scientific aspect the etymological portion of the apparatus is the most uncertain, dangerous and misleading. The simple, convenient and sure solution is for the compiler of a dictionary to disengage entirely from dealing with etymologies. . .research into the etymology of Mishnaic Hebrew is approximately in the same state as it was at the beginning of this century, and the greater part of it is defective. . .the sad fact is that the historical philology of the Semitic languages has not left us a firm legacy of a well-based etymological approach. . .¹

Goshen-Gottstein, in his introduction to his projected synchronic dictionary of modern Hebrew, points here to the unsatisfactory state of Hebrew etymology, and especially to that of the "language of the sages," the dialect of the Mishna and related works. He draws attention to the fact that the etymological tradition in Hebrew has been directed chiefly towards solving problems of exegesis of the Biblical and Mishnaic literature, contrary to that of western languages, the emphasis being on an historical approach for modern, and a comparative approach for classical languages. Research into classical and modern languages has sought a point of origin of words for its own sake, unlike that into Hebrew which has always had one eye on some

¹M.H. Goshen-Gottstein, *Introduction to the Lexicography of Modern Hebrew* (Jerusalem 1969) pp. 160, 162.

obscure text. It will cast no aspersions on a useful reference aid to suggest too that Mishnaic Hebrew boasts a dictionary which probably has more impossible etymologies than any that has ever been published.² Curiously, such study as has been done has scarcely penetrated current works of reference. Thus Avraham Even-Shoshan's large Hebrew dictionary *Ha-milon he-hadash* under the date of 1966 can do no better than connect Hebrew WTYQ with the Arabic WəYQ even though the word is more likely a loan from Greek (ῥῆϊκός or perhaps εῤῥικος) and suggestions to that effect have long been in print,³ although both scholars who made this suggestion, intoxicated, like most Semitists, by Arabic, were inclined to think that the root was ULTIMATELY Semitic.⁴ The connexion between WTYQ and WəYQ cannot be genetic. Aramaic and Hebrew both merged initial *w* with *y* at an early date,⁵ presumably before the Aramaic/Canaanite split, and had this morpheme existed (perhaps being fortuitously absent in the Bible) it would have had an initial *y*. The word in Arabic is doubtless a loanword too, probably via Aramaic, and all the derived forms from the supposed root *w θ q* are later coinages. It is probable that the Arabic lexicon is full of such "spurious" roots--although in all likelihood the process of trilateralizing foreign words has been proceeding continuously ever since Semitic took the triliterum as its basic building block.

As far as Semitic is concerned the tendency to find a genetic connexion both with Chadic⁶ and with Indo-European⁷ makes matters more complicated. Even though attempts so far must be deemed to be inconclusive in detail, and the relatively recent invention of writing will make hard data permanently unavailable, the likelihood of the correctness of the general thesis that there is a genetic connexion in languages stretching from Iceland via the Middle East and Northern India to the shores of Lake Chad is growing. This makes it all the more important to do spadework to show what loans were taking place, since they can easily throw off systematic reconstruction.

The hypothesis of this paper is as follows: 1. The Greek koine had a facultative *w* at the beginning of various words related to the "Aeolian digamma."⁸ 2. These words were borrowed by Mishnaic Hebrew with the initial *w* thus recreating a position for *w* which had previously been (almost) eliminated. 3. The spread in permissibility of initial *w* rendered possible the back-formation of words beginning in *w* from "genuine" Semitic roots, although some of these may in fact be contaminated forms, influenced by similar Greek words.

²I refer to M. Jastrow, *A Dictionary of the Targumim, the Talmud Babli and the Midrashic Literature* (London and New York, 1903; several times reprinted, most recently in 1972).

³See Jakob Levy, *Neuhebräisches u. chaldäisches Wörterbuch über die Talmudim u. Midraschim* (Leipzig, 1876-89) vol.1, p. 506, and S. Krauss, *Griechische u. Lateinische Lehnwörter im Talmud, Midrasch u. Targum* (Berlin, 1899) vol.2, p. 239.

⁴Typical of this tendency to regard Arabic as the ultimate source of Semitic etymology are Guillaume in his studies of Hebrew and Al-Yasin in his studies of Ugaritic. The patent archaisms of Arabic do not mean that it could not be innovative in other areas and receptive to borrowing.

⁵Z.S. Harris, *Development of the Canaanite Dialects* (New Haven, 1939) p. 8.

⁶Joseph H. Greenberg, *The Languages of Africa* (Bloomington, 1963).

⁷Linus Brunner, *Die gemeinsamen Wurzeln des semitischen u. indogermanischen Wortschatzes* (Berne and Munich, 1969).

⁸The koine is held to be derived from the Attic-Ionic dialects which lost *w* earliest. It is entirely possible that this sound persisted in these dialects at a substandard level, and remain unrecognized by the official spelling. See B.F.C. Atkinson, *The Greek Language* (London, 1931) Chap. 7.

Let us first consider the status of initial *w* in Biblical Hebrew. Köhler-Baumgartner⁹ lists sixteen entries beginning with *w*. Of these one is the letter itself, i.e. not really a word; six are proper names (Vaheb, Vayzatha, Vaniah, Vophsi, Vashni and Vashti), two of which (Vaniah and Vashni) are held by some to be textually doubtful and the rest of which are probably foreign; five are dubious or corrupt forms or references to other entries. This leaves only three morphemes, *wə* 'and' and its variants, which are listed under two entries;¹⁰ *wālād* 'child' and *wāw* 'hook'. The existence of *wə* is explained by Harris on the basis that it never really occurred initially; since it always joins a pair, it is always in effect medial.¹¹ This explanation is somewhat difficult, since *wə* and its variants can clearly begin a discourse, e.g. Exodus 2.20 *wə ayyō* 'So where is he?' Possibly *wə* represents a vocalic sound *ū*, a change which predated the *w-y* shift, much as the "three alephs" of Ugaritic doubtless represent pure vowel sounds.¹²

The fact that *wāw* is also the name of the letter seems to me to be crucial in explaining the existence of this morpheme. However the letters of the alphabet originally got their names, whether with Gesenius we assume that the picture of the object became the sound of its first letter, or with Dunand we hold that the name was to suggest the letter in question,¹³ an obvious problem would arise in creating a name for a letter the OCCURRENCE OF WHICH WAS RESTRICTED TO NON-INITIAL. Accordingly an artificial name was created for *w*, being simply a repetition of its sound, *wāw*, perhaps patterned after *mēm* and *nūn* which have this pattern accidentally. On account of its arbitrary shape, it came to acquire the technical meaning 'hook', much as Greek *delta* came to denote a delta-shaped object such as the island at a river mouth.¹⁴

I would account for *wālād* as follows. This word occurs for certain only once in Gen. 11.30, and in some manuscripts of IISam. 6.23, where the phraseology is very similar. In both instances it denotes an offspring irrespective of sex. Now Arabic possesses such words rather commonly, e.g. *ʿarūs* may mean 'bride' or 'bridegroom', *walad* may mean 'boy' or 'girl'. In Hebrew, however, the "native" word is specific as to sex: *yeled* can only mean 'boy',¹⁵ even though the plural can mean 'boys and girls', just as *ben* means specifically 'son' while *bānīm* can mean 'sons and daughters'. Such a situation exists elsewhere. In Spanish *rey* means 'king', but the plural may mean 'king and queen'; *padre* means 'father', but *padres* can mean 'father and mother'. Accordingly *wālād* was borrowed from another Semitic language which had retained the earlier non-specific use of the word. So *wālād* in Biblical Hebrew must be classified as a later dialect loan--similar to the proper names. The loan here fills a semantic lack in the borrowing language, occasioned by a development in Hebrew whereby the unmarked form of sex-differentiated items became specifically male. In this way we can understand the ketib *naʿar* (Gen. 24.14 etc.) which the punctators corrected to *naʿarā* in accordance with later Hebrew usage. A similar example in English of the phonetic situation is a morpheme such as *jaune brilliant* (a kind of artist's paint) which begins with a phoneme [ʒ] which is distinctive in English, but occurs initially only in one or two words which have not been anglicized. Once the word *wālād* exists, the Mishnaic WLDNY 'prolific' is readily formed by

⁹Hebräisches u. aramäisches Lexicon zum Alten Testament (Leiden, 1967).

¹⁰Köhler presupposes a form **wan* to explain the geminate after *waw* consecutive.

¹¹Z.S. Harris, *loc. cit.* footnote 12.

¹²Joseph A. Reif, "The loss of consonantal Aleph in Ugaritic," *Journal of Semitic Studies* 4 (1959) pp. 16-20.

¹³David Diringer, *The Alphabet* (New York, 1968) vol. 1, p. 168.

¹⁴Cf. also the uses to which English letters are put--t-shirts, u-turns, etc. (Raimo Antilla, *An Introduction to Comparative and Historical Linguistics* (New York, 1972) p. 4.

¹⁵E.g. Gen 21.8, Ex 2.7 and frequently.

the addition of the adjectival ending.¹⁶ A further indicator of the absence of initial *w* in Biblical Hebrew is the word *ʔWYL* which has no convincing etymology in Semitic and is to be related to the Indo-European root seen in Lat. *vilis* 'worthless, mean'. The *ʔ* is prosthetic and the form doubtless assimilated to the derogatory diminutive which is seen in *ʔLYL* 'godling'. Biblical Hebrew, then, contains only loanwords and, the name of the letter beginning in *w*-.

In Mishnaic Hebrew foreign origins have been proposed for a number of words beginning with *w*-. Some of these will be freshly examined here and new ones proposed.

First it should be pointed out that there are several back-formations. The fact that words were being freely loaned from Greek probably eased the formation of words such as *WYTR*, *W^cD*, *WYDWY* all of which derive from stems well known in Biblical Hebrew and which had retained their consonantly in medial position e.g. *WYWTR*, *ʔW^cD*, *WHTWDH*. I suspect however that in the case of the first root there is some contamination from *ἐλευθερος* and its derivatives. This word occurs dialectally (and in Modern Greek) as *λεύτερος*. Thus the Mishnaic *WTRN* 'liberal, generous' has exactly the same connotations as *ἐλευθεριος*. *WTR* develops the meaning of 'forgo, forgive' in the spirit of the corresponding Greek verb which may mean 'set free, clear, release a debtor'.¹⁷

The second root gives the form *W^cD* as in the common form *BYT W^cD* 'place of assembly'.¹⁸ The form *WY^cWD*¹⁹ which appears to be a verbal noun of the *pi'el* mode is in all likelihood an artificial creation for the purpose of exegesis of Lam 2.15 and probably never existed as a morpheme in the language until coined for the purpose of explaining this verse. The New English Bible renders 'How shall I cheer you?' The root is connected in this instance with *w^cd* and made to mean (as an exclamation) 'how greatly was I used to make appointments with you!'

WDʔY could be a back formation from the root *WDH* although the *w* does not appear consonantly in Biblical Hebrew in forms (e.g. *hiph'il*) where there might be some semantic connexion. Here are some examples of its usage:

HHWʔ DNHYT QMYH DRB HNYNʔ ʔMR HʔL HGDWL HGBWR WHNWRʔ WHʔDYR WHʔZWZ WHYRʔWY
HHZQ WHʔMYʃ WHWDʔY WHNKBD.

'A certain man went down (to pray) in the presence of R. Hanina. He said: O God, the great, mighty, fearsome, splendid, powerful, strong, fearless, *waddai*, and honorable.'²⁰

ZKR WDʔY 'A *waddai* male' (as opposed to one of doubtful sex.)²¹

ʕSM WDʔY 'A *waddai* sin-offering' (as opposed to one where it is not clear whether the sin has been committed or not.)²² I would suggest that this is borrowed from the Greek verb *οἶδα* 'to know' which is derived from **foida* itself related to Indic *vēda*.²³

¹⁶ Jerusalem Talmud, Baba Qama, 5a.

¹⁷ Liddell and Scott, A Greek-English Lexicon s.v. *ἐλευθερω*.

¹⁸ Mishna Abot 1.4 and frequently.

¹⁹ Midrash Eka Rabbati to Lamentations 2.13.

²⁰ Babylonian Talmud, Berakot 33b.

²¹ Mishna, Arakin 1.1.

²² Babylonian Talmud, Yoma 85b.

²³ J.B. Hoffman, *Etymologisches Wörterbuch des Griechischen* (Munich, 1966) p. 226.

This suggests that the verb was still preserved in the koine with an initial *w-*, which was probably facultative, hence its disappearance in the orthography, but was heard so by Aramaic speakers. Hence the meaning is 'known' or 'certain'. In the first usage it may well be directly equivalent to Greek εἰδώς 'one who knows' and hence mean 'knowing, omniscient' as applied to God.²⁴

It has long been suspected that the word *wst* meaning 'menstruation' is connected with Greek ἔθος, but the crucial point, that it is a CALQUE has been missed. Thus Krauss in 1899 made this derivation,²⁵ expressing some surprise that the word does not seem to occur in this meaning in the classical Greek. In the German edition of Chanoch Albeck's work on the Mishna²⁶ published in the same city as Krauss' work, seventy-eight years later the word is still flagged with a question mark.

In Hebrew the word for 'way' (ʿRH, DRK) is used as a sexual euphemism:

DRK NŠYM LY 'The way of women is upon me' (Gen. 31.35)

ʿRH KNSYM 'Sarah had ceased to have the way like women' (Gen. 18.11)

DRK GBR BʿLMH 'The way of a man with a maid' (Pr. 30.19)

The existence of this euphemism was well known to the Jewish sages, since R. Jochanan thus understood Gen. 6.12 HŠHYT ʿT DRKW where it is not so clear that this euphemism is intended.²⁷ Accordingly ἔθος or the similar word used by the Septuagint in the Gen. 18.11 passage came to mean 'menstruation' in the mouths of Greek speaking Jews and was borrowed in this sense into Mishnaic Hebrew with metathesis. This word was pronounced in Greek *wethos* from *σφεθος.²⁸ These comments on the phonetic and semantic development of the word should confirm the etymology of this word already suggested by Levy in 1866.²⁹ The word does in fact occasionally occur in Mishnaic Hebrew in a sense much closer to the original Greek meaning:

KK HWʔ WSTW ŠL PLWNY MGRŠ ʔT NŠYW

'Such is the *ethos* of so-and-so who divorces his wives!'³⁰

I propose that WRYD 'vein, nerve' is a loanword from Greek ἀρτηρία and hence is related to English *artery*. According to Liddell and Scott s.v. ἀρτηρία is contracted from ἀερτηρία which is connected with αἵρω 'attach'. αἵρω itself is derived from *ἀφερρω. Accordingly we may suppose the original form to have been *awerteria which with metathesis and vowel loss gave *werret and hence WRYD.³¹ The development would then be *awerteria* > *wertēr* > *werrēt* >

²⁴Cf. the frequent Koranic appellations ʿLYM, XBYR.

²⁵*Op. cit.* vol. 2, p. 237.

²⁶p. 375.

²⁷MLMD ŠHRBYʿ BFMH ʿL HYH WHYH ʿL BFMH WHKL ʿL ʔDM WʔDM ʿL HKL

'This verse teaches that they brought about the copulation of male domestic animals with female wild animals, of male wild animals with female domestic animals, of both types of animals with woman, and of man with both types of animals.' *Babylonian Talmud, Sanhedrin* 108a. A similar explanation is given in Midrash Genesis Rabba 26.8 by R. Azariah.

²⁸Hoffman, *op. cit.* p. 70. H. Frisk, *Griechisches Etymologisches Wörterbuch* (Heidelberg, 1960) vol. 1, p. 449 sets up a *Grundform* *Fēθος.

²⁹Jakob Levy, *Chaldäisches Wörterbuch über die Targumim*. . . (Leipzig, 1867-68) s.v.

³⁰*Mishna, Nedarim* 9.9.

³¹Frisk, I.155 gives *α(F)ερ-τηρ.

werrēd. The corresponding words in Arabic and Syriac must also be loans from the same source, since the connexion of the Arabic word (meaning 'jugular vein') with the root WRD is very tenuous. It is possible that popular etymology has also played a part in the development of the word. The voicing of *t* in an indisputable loanword is seen in *τύπος* 'model' which occurs in the Mishnaic Hebrew as a doublet, the unvoiced form TWPS meaning 'formula' and the voiced form DPWS meaning 'mould'. Probably what happens in such a case is that the Greek voiceless stop is different in articulation from the nearest available Hebrew-Aramaic stop and may therefore appear to be voiced. The word is borrowed in one sense by a group who hear it unvoiced, and in another sense by a group who hear it voiced, and then the groups borrow from one another. In any case this does establish the possibility of a Greek *t* being heard as voiced and rendered accordingly.

The word WŠT is connected by Krauss with *φοτός* 'mast'³² in connexion with an obscure phrase used as a comparison to express the unpleasantness of croup in Babylonian Talmud, Ber. 8a. Whatever that particular phrase may mean, the word normally means 'food-pipe', and *φοτός* would not seem an appropriate source for this meaning. I would suggest that the word is to be connected with Greek *οἰσοφάγος* 'gullet'. The origin of the Greek word is disputed, most connecting it with *οἶσιν* the suppletive future form (itself obscure in origin) of *φέρειν* 'carry' plus *φαγεῖν* 'to eat', i.e. 'food-carrier',³³ The Oxford English Dictionary s.v. *oesophagus* believes this to be impossible, and comments that the word ought properly to mean 'eater of osiers', even though this makes no sense. WŠT would seem to be formed from the first part of the compound (i.e. the 'carrying' part) and the *-t* is derived from some related word such as *οἰστός* 'that which can be borne', in a transferred sense 'endurable'. Actually the meaning of the Greek word may well be 'osier which consumes'; the pipe being compared to the osier on account of its being long and thin. Hebrew uses the word QNH 'reed' to mean the windpipe which is a similar organ.

The form WTYB occurs once only in the phrase 'D ŠYMWY WTYB 'until the *waṭṭb* dies'.³⁴ The passage declares that in the event a woman becomes menstruous during intercourse, her husband must wait until detumescence before withdrawal so as not to derive pleasure therefrom, since this would transgress the law prohibiting intercourse during the menses. This word is the reading of the *Aruch*.³⁵ Current editions read WTYBYH which in accordance with Rashi's commentary ad loc. would mean 'until he (or it) dies, AND IT IS WELL WITH HIM.' This is forced and improbable. Kohut also quotes the reading WYWS? 'and he withdraws' and ?BYT which appears to be a variant of WTYB and is equally obscure. The vocalization *waṭyāb* proposed by Kohut and adopted by Kasowski³⁶ is surely incorrect. Kohut reaches this by quoting the Arabic *al-ṭaṭyaba:nī* 'the best two things' one of which by a poetic conceit may be the vulva. From this he extrapolates the word *ṭaṭyabu* and transfers the Arabic vocalization to the Hebrew. There is absolutely no basis for these procedures, and one would further expect the spelling WTYBYB if the *yōd* were consonantal. According to the principle of *lectio difficilior* we ought to accept the existence of this word, but it must be said to be highly doubtful. If it exists at all, it can perhaps be connected with *τύλος*, which means basically 'swelling' and various derived meanings such as 'boil' and 'phallos'. The Latin words *tumeo* 'to swell' and *tumor*, *tuber* are all connected with this word. The Greek word is connected by Hofmann with the supposed form **tul-* **tyel-* and **tum-* all of which mean 'swell' or 'be excited'. The Arabic WTB 'milk-skin' and hence 'large breast' would also seem to belong in the same semantic category of 'swell'.

³²Krauss, *op. cit.* s.v.

³³Cf. Frisk, II 368.

³⁴Babylonian Talmud, Shebuot, 18b.

³⁵*Aruch Completum* ed. Alexander Kohut (Vienna, 1878) s.v.

³⁶Chaim J. Kasowski, *Thesaurus Talmudis* vol. 12 (Jerusalem, 1963) p. 9.

The word WYQ has been connected with three Greek words εὐθικός and εὐθούδικος (Levy)³⁷ and εθικός (Krauss).³⁸ Krauss probably intended to write ῥθικός. The latter is doubtless the origin of the word, going back to the same Indo-European morpheme as ἔθος, and similarly having a facultative *w* in pronunciation. εὐθικός appears to be a much less common word related to εὐθούς 'straight, straightforward' the antecedents of which are obscure. εὐθούδικος ('judging righteously') seems equally gratuitous when ῥθικός covers the meanings quite well. It would appear from the usage of Mishnaic Hebrew that a *wāṯlq* was one who behaved with particular scrupulosity. Thus the *wāṯlqm* were particular about the manner of reciting the morning prayer;³⁹ *wāṯlq* is applied to Abraham among such terms as 'select', 'beloved', 'faithful'.⁴⁰ The term is applied to a particular scholar who was able to prove by logical deductions that an unclean animal was clean.⁴¹ Probably here *wāṯlq* does not refer to his scholarly acumen, but rather identified him as happening to belong to the ultra-orthodox, the *wāṯlqm*.

WYTQ, WTQ generally in the plural (?) with suffix *-l* appears to denote some kind of malady.⁴² Levy derives it from some form of φθίσις 'consumption', which seems very distant phonetically.⁴³ Krauss connects it with ἔκτικῃ which seems difficult on account of the rough breathing.⁴⁴ I would tentatively suggest a connexion with Latin *vaticinare* which may mean 'to rave'.⁴⁵ Hence the "plural" form would be basic.

Two other morphemes containing *w* elements may be mentioned here in conclusion. *WYR* from Greek ὄρη contains the *w* glide which is retained in the Aeolian ὄρη. This again suggests that the koine retained *w* in places where the official spelling had discarded it. *WWZ* 'goose' (in Syriac *wāzā* without the prosthetic element) is to be connected with the Indo-European morpheme which appears in old high German as *gans*, Latin *ans[er]*. The jump to Semitic involves the frequent initial *g/w* alternation and assimilation of *n*.⁴⁶

³⁷Levy, *Chaldäisches Wörterbuch*, s.v.

³⁸Krauss, *op. cit.*, vol. II, s.v.

³⁹*Babylonian Talmud*, Berakot 96.

⁴⁰*Ibid.*, *Erubin* 105a.

⁴¹*Ibid.*, 13b.

⁴²*Babylonian Talmud*, *Gittin* 70a, *Nidda* 17a. It occurs in mixed Hebrew-Aramaic passages.

⁴³Levy, *Neuhebräisches u. chaldäisches Wörterbuch* s.v.

⁴⁴Krauss, *op. cit.* s.v.

⁴⁵In Cicero *Oratio Pro Sestio* 10.23 *vaticinari* is parallel to *insanire*.

⁴⁶I wish to express my thanks to the Graduate School of the University of Wisconsin--Milwaukee for support of this research and to Professor C. Rabin of the Hebrew University for valuable suggestions. My colleague Professor Robert Ross carefully read this paper to its benefit and mine.

*This paper is part of the
Proceedings
of the
Second North-American Conference on Semitic Linguistics
Santa Barbara, California
March 25-26, 1974*

A SUPRASEGMENTAL FEATURE OF LENGTH IN SEMITIC

Alan D. Corré

University of Wisconsin - Milwaukee

It is proposed that at a preliterate stage of development Semitic verbs appeared in different modes by lengthening each of the first five phonemes. Sound change had obscured the regularity of this system by the time Hebrew and Arabic were reduced to writing, especially in Arabic IV and VII and their reflexes in other languages. Since nouns also used the length feature to express definiteness (initial consonant length being original) and plurality (sound plural being nunation + length) it may be said that Semitic possessed a length morpheme which varied in its function in accordance with its position in the word.

TABLE OF CONTENTS

TABLE OF CONTENTS	page 9
INTRODUCTION	10
1. Length of C ₀ : qat:ala	10
2. Length of V ₁ : qa:tala	11
3. Length of C ₁ : q:atala	12
4. Length of V ₂ : qata:la	12
5. Length of C ₃ : qatal:a	13
6. Length of two elements	13
7. Length in nouns -- Definiteness and plurality	13

INTRODUCTION

Paradigms, like most "historically transparent forms"¹ are subject diachronically to two conflicting trends--sound shifts which strike with "cataclysmic force"² and create irregularities, and analogical adjustments which regularize forms that fit into similar syntactic slots but differ phonologically. Thus, the Portuguese reflex of Latin *sum* is endowed analogically with a vowel making it look like the reflex of Latin *sto* which has the vowel "normal" at this point in the paradigm, hence *sou*, *estou*, without the nasalization one might have otherwise anticipated in the first form. In contrast, sound change takes forms exhibiting the "regular" endings in Latin *feci*, *fecit* and produces the irregular *fiz*, *fêz*.

It is the thesis of this paper that one may posit an original "regular" feature in the Semitic paradigms of the modes of the verb that has been buried by cataclysmic sound change. This feature, if it can be established, may have interesting theoretical implications.

It is proposed that two major morphemes were used to differentiate the modes in Semitic, a *t* prefix (which may by regular metathesis become an infix) and which will not be further considered at this time, and a LENGTH element³ which may be regarded as segmental in the sense that it occurs in a minimal pair as a segmental phoneme (Ar. *qatala/qattala*) but as supra-segmental in the sense that, like accent, it may vary in position in a word, injecting a nominally consistent semantic content. For our purpose it would not seem important whether the item was in fact LENGTH, i.e. a difference in the time that a particular articulatory position is held⁴ or gemination, i.e. a cluster of two occurrences of the same phoneme.⁵ The term length will be used here without deciding this question.

The reconstructed basic verb forms are taken to be: **qatala* (perf.) and **yaqatala* (impf.)⁶ with vowels *i* or *u* also possible for V₂ with semantic difference.

We posit that Semitic formed aspects of its verbs by LENGTHENING ANY OF THE FIRST FIVE PHONEMES, consonantal or vocalic, of the basic verb form, with adjustments for other forms. Two of these are very obvious. Others are obscured by sound change.

1. LENGTH OF C₂:*qat:ala*

Examples of the semantic input of lengthening C₂, which may be privative, intensive or extensive are as follows:

¹Yakov Malkiel, "Paradigmatic Resistance to Sound Change," *Language* 36 (1960) p. 281.

²*Ibid.* p. 331.

³There is some evidence for such a morpheme in Dravidian also. See P.C. Ganeshsundaram, "Morphemic Values of Consonants in Tamil," *Indian Linguistics* 16 (1955). "Perhaps the form *koṭṭu* from *koṭu* 'give' means 'give with a vengeance'." This curiously resembles the Semitic intensive form which is marked by length of the middle consonant of the root. Also the geminate past tense marker in Tamil tends to render the verb transitive (-*tt*-). This undoubtedly originally marked a *t:/t* distinction rather than the modern colloquial lenited *t/d* distinction.

⁴C.F. Hockett, *A Manual of Phonology* (Baltimore, 1955) p. 39.

⁵*Ibid.* p. 232. The macron or double consonant is used for orthographic length and the colon for phonetic length.

⁶I do not discuss here the distinction between *yaqatulu* and *yaqtulu*. Semitic may originally have been monotemporal with sound change leading to specialized forms, as well as the placing of the affix after, rather than before, the verb.

- Heb. *sāqal* (< *saqal*) 'he threw stones at'
 siqqel (< *saq:al*)⁷ 'he removed stones from'
 šabar (< *šabar*) 'he broke'
 šibbēr (< *šab:ar*) 'he smashed'
- Arab. *ḡariḡa* 'he was glad'
 ḡarraḡa 'he gladdened'
 kasara 'he broke'
 kassara 'he smashed'

2. LENGTH OF $V_1:qa:tala$

For V_1 length the semantic input is conative:

- Heb. *sābab* (< **sabab*) 'he surrounded'
 **šōbeb*⁸ (< **sābīb*) 'he protected'
- Arab. *sabaqa* 'he overtook'
 sabbaqa 'he raced'
 jalasa 'he sat'
 jallasa 'he sat next to'

It will be observed (1) that the semantic input in classical Hebrew and Arabic is variable and cannot be defined exactly even by intuitional criteria. Even assuming that there was some original meaning to the length of C_2 or V_1 in Hebrew and Arabic or their protolanguage, semantic change in individual lexical items has obscured it, just as the phonological unity has been obscured; (2) in Hebrew, length of C_2 and length of V_1 have become largely suppletive, the C_2 length being standard for most verbs, and V_1 length standard for verbs whose roots are of the shape C_1uC_2 , C_1yC_2 or $C_1C_2C_2$. Verbs in classical Hebrew which exhibit both forms, e.g. *qwm* (long consonant Psalms 119.106, long vowel Isaiah 58.12), are displaying different dialects of the language or a dialect borrowing situation.

It is interesting to observe that the interpretation of the Jewish sages of Deuteronomy 26.5 ?RMY ?WBD ?BY 'An Aramean tried to kill my father' (as in Targum Onkelos $\text{?R?H B? ? L?WBD? ?YT ?B?}$) rather than 'A wandering Aramean was my father' shows clearly an awareness of the force of this conative form ($\text{?ōbēd} < \text{?a:bid}$) even though it may be preferable to interpret the form in this particular context as the homonymous participle of the simple mode: ?BD 'wandering'.

⁷By assimilation of first vowel to second alternative vowel i . For a similar drift in Arabic see C.A. Ferguson, "The Arabic Koine" *Lg.* 35 (1959), 619; on the character of this change see H.M. Hoenigswald, "Graduality, Sporadicity and the Minor Sound Change Processes," *Phonetica* 11 (1964), 202-215. $i > \bar{e}$ is a regular late Hebrew development ($\text{?ēz} < \text{?īzzu}$, $\text{?ābēl} < \text{?ābilu}$ etc.).

⁸Not attested in OT in the perfect; there are several examples of the imperfect. On $a: > o:$ see Z.S. Harris, *Development of the Canaanite Dialects* (New Haven, 1939), 43-45.

3. LENGTH OF C₁:q:atala

Less obvious is the fact that the length of C₁ gives Hebrew *nip^cal* and Arabic VII:

Ar. qatala → *q:atala > *nqatala > (i)nqatala

Heb. qatala → *q:atala > *nqatal(a) > *inqatal > *niqatal⁹ > niqatal¹⁰

The basic sound change is C: > nC.¹¹ In Arabic there is a prosthetic vowel which is said to be elided if a vowel precedes; it would be more correct historically then to say that a vowel is inserted if no vowel precedes. Long consonants are phonologically possible at the beginning of words; Moroccan Arabic has them and in some cases they may represent an ancient Semitic form e.g. *ṣuḥ*, 'wool', *ṣ:uḥ* 'the wool' (see below).

In the Hebrew impf. *yiqqātēl* the original consonantal length was retained, i.e. it is incorrect to say that "the n was assimilated," and in the imperative it shows up with a prosthetic *i*. Although this latter form is written with the graph for *h*, it is highly probable that this merely represents a vowel at the beginning as it often does at the end, i.e. *hqtēl* should be normalized *iqqātēl*. So Arabic initial 'aliḥ without hamza = Hebrew initial *h*.¹²

The semantic input of this length is reflexive/passive.

4. LENGTH OF V₂:qata:la

Length of V₂ gives Hebrew *hip^cāl* and Arabic IV.

Ar. (impf.) **yaqatilu* → **yəqatī:lu* (vowel centralized with shift of stress¹³) > **yəqti:lu*. The long vowel is again shortened by analogy with the other conjugations, and the semantic load is

⁹By metathesis.

¹⁰V₂ is elided when C₃ is vowelized and its syllable is accented. Cf. *ʔamar* but *ʔamrā*, *yḏabbēr* but *yḏabbrū*.

¹¹At the beginning of a word: in the Hebrew imperfect the original length is retained. In Arabic *n* is brought in by analogy. The Hebrew imperative is a secondary formation from the imperfect. Forms such as Hebrew *bēharēg* (Ez. 26.15) *lēṣāʔōt* (Ex. 34.24) point to the prosthetic nature of the vowel where there is no *n*. See the numerous cases cited in H. Bauer and P. Leander, *Historische Grammatik der Hebräischen Sprache des Alten Testaments* (Hildersheim, 1965), 228.

¹²It seems likely that the *h* is used to represent "nothing," i.e. is a vowel bearer, elsewhere. Later Hebrew has *mō(h)ēl* as the participle of the root *māl* which is quite on the lines of the Arabic participle of the type *qā'im*. It is probably an attempt to represent a dialect which had originally a glottal stop which became an *ōē* glide. From this the other parts of a new verb *māhal* appeared by back formation. Probably Aramaic forms like *bhet* have a similar explanation.

¹³It seems to me that the vowel sign *ḍamma* of classical Arabic often represents a *šwa* possessed by the classical language but which the orthography did not recognize. Thus the *ḍamma* of the diminutive form C₁uC₂ayC₃un was probably a *šwa*. (It is thus represented in the fossils of this form in Classical Hebrew, e.g. *zəʿēyr* 'very little'. See Paul de Lagarde, *Uebersicht über die in Aramaischen Arabischen und Hebraischen übliche Bildung der Nomina* (Goettingen, 1889), 85-87.) Also the imperfect of III and IV.

shifted to the first syllable. (Pf.) *qata:la > *qta:la > *aqta:la. The vowellessness¹⁴ of C₁ was caused by the length of V₂ which has become short again by analogy with other conjugations and the semantic load is shifted to the first syllable. The presence of hamza is unexpected.¹⁵

Heb. *qatila (alternate form of simple verb) → *qati:la > *qti:l(a) > iqtī:l. (Impf.) *yaqati:lu > yaqti:l (vowel loss with change of stress.)

The semantic input is generally causative.

5. LENGTH OF C₃:qatal:a

Length of C₃ gives the rare Arabic IX and also may explain certain Hebrew "adjectives" *ʔaruk:a 'it was long' in a participial form to ʔārōk with change C:#>C#--but with length preserved in fem. and plur. where there was no apocope. Hebrew adjectives denoting colors are frequently of this form, and it may be noted that Arabic IX is largely restricted to this class.¹⁶

6. LENGTH OF TWO ELEMENTS

Sometimes more than one phoneme of the simple form was lengthened. This gives Arabic XI (length of V₂ and C₃) and explains some anomalous Hebrew forms--nikkappēr 'will be atoned' (Deut. 21.8), hinnabbʔū 'purported to be prophets' (Jer. 23.13) which have length of C₁ and C₂. The form ngōʔālū 'are polluted' (Is. 59.3), however, is best explained as an internal passive with length of C₁ < *g:uʔila + plur. morpheme.

7. LENGTH IN NOUNS - DEFINITENESS AND PLURALITY

Definiteness was expressed in Semitic by a long first consonant, as suggested by Ullendorff:¹⁷

*bayitūna	'a house'
*b:āyituna	'the house'

The change of stress occasions the elision of the last syllable, explaining the lack of nunation in definite nouns in Arabic.¹⁸ In Hebrew the sound change was #C:>#aC: and later #aC₁: and #a:C₂ and #eC₃ where C₁ = most consonantal phonemes, C₂ = some consonantal phonemes

¹⁴I do not account here for vowellessness as opposed to centralization. The true situation in this regard, as symbolized by the supposed dual function of the Hebrew ʔwa needs further investigation.

¹⁵It is probably due to an early confusion with the morpheme of the "relative" as E.A. Speiser has noticed. The extensive forms in Semitic with prefixed s- or š- are probably also a combination of this form with an added morpheme. Cf. also the Talmudic 3d sing. masc. impf. in l- probably the combination of the morphemes li- and ya- which appears in Syriac as a dialect variant ne-.

¹⁶See W. Wright, *A Grammar of the Arabic Language* (Cambridge, 1896), 1:43.

¹⁷"The Form of the Definite Article in Arabic and other Semitic Languages," *Arabic and Islamic Studies in honour of Hamilton A.R. Gibb* (Leiden, 1965).

¹⁸Contra J. Kuryłowicz, "La Mimation et l'article en arabe," *Archiv Orientalní* 18 (1950), 323-328.

e.g. \mathfrak{r} , and C_3 = some consonantal phonemes coupled with specified conditions of stress. Initial orthographic h again represents an initial vowel.

In Arabic the sound change was $\#C: > \#(a)\ell C_1$ and $\#(a)C_2:$. The classical Arabic orthography bears on its face the fictions that (1) the ℓ is assimilated before "sun-letters" (C_2) when in reality it was never there; and (2) the a of al is elided after vowels, whereas in reality the a or i is inserted prosthetically after consonants or at the beginning of a discourse.

This change must be seen as parallel to the change in the nip^{al} above. ℓ and n must represent originally the same phoneme which dissimilated the long first consonant, and a dialect borrowing situation must be involved, the precise character of which we can only guess.¹⁹

Sound plurals and the dual are formed by vowel length in the noun suffix. In Arabic

Masc. $*xa:d  muna^{20} > xa:d  mu:na$ 'male servants'
Fem. $*xa:d  matuna > xa:d  ma:tun$ 'female servants'

In Hebrew

Masc. sing. $*malakima > *mal\mathfrak{k}i > *mal\mathfrak{k} > *m  lek > m  lek$ 'king'
Fem. sing. $*malakatima > *mal\mathfrak{k}ati > mal\mathfrak{k}  $ 'queen'

give rise to

Masc. plur. $*malaki:ma > ml  k  m$
Fem. sing. $*malaka:tima > *malaka:t > ml  k  t$

The dual represents a specialized use of the singular accusative with length ($-a:n  $ with dissimilation of the last vowel). The oblique form in $-ayni$ is perhaps a dialect variant (cf. Hebrew $d  t  n/d  tayn$ Gen. 37.17). Hebrew fossilized forms like $y  m  m$ 'by day', $\mathfrak{z}il\mathfrak{z}  m$ 'day before yesterday' represent another specialized use of the accusative ending plus length.

Many 'broken plural patterns ($\mathfrak{?a}\mathfrak{f}^{\text{al}}$, $\mathfrak{fu}^{\text{al}}$, $\mathfrak{fi}^{\text{al}}$) display a long vowel before the final consonant of the root. This suggests that while sound plurals lengthened the vowel of the noun ending ($-uma$, $-atuma$ etc.) broken plurals lengthened the vowel of the body of the noun. This is seen in a straightforward way rarely e.g. $baladun$ ($*baladuna$) 'city' plur. $bil  dun$ ($*bala:duna$). The alternative plural $buld  nun$ is to be derived from a form with a lengthened accusative morpheme ($*baladanu$) with a change in the first vowels similar to that proposed for form IV of the verb above. Nunation is added analogically. A plural such as $kil  bun$ 'dogs'²¹ suggests as sing. $*kilabuna$ or $*kalabuna$. This pattern exists as in $\mathfrak{?inabun}$ 'grape' and may have been a doublet of the standard sing. $kalbun$.

¹⁹For example, let there be a dialect A in which the C_1 : morpheme was in use for verbs but not for nouns, definiteness being expressed by another morpheme or not expressed. In verbs the $C_1: > nC_1$ change takes place. The speakers then come into contact with speakers of higher dialect B which has C_1 : in both nouns and verbs, but the dissimilatory n phone is palatalized and heard by speakers of A as ℓ . This "definite article" is then borrowed and contrasts with the n of the verb.

²⁰Reconstructed noun endings are $-una$ or $-uma$ (nominative) $-ana$ or $-ama$ (accusative) and $-ina$ or $-ima$ (genitive.)

²¹I suspect that the initial $kesra$ in Arabic sometimes represents no vowel, i.e. a cluster, a situation not admitted by the traditional grammarians. Tamil orthography contains a similar fiction.

FIRST NORTH-AMERICAN CONFERENCE ON SEMITIC LINGUISTICS

Santa Barbara, California

March 24-25, 1973

The first North-American Conference on Semitic Linguistics was organized by Robert Hetzron (University of California, Santa Barbara) with the cooperation of Giorgio Buccellati (University of California, Los Angeles) and Joseph L. Malone (Barnard College--Columbia University). The purpose of the Conference is to promote the interest of Semitists in the various modern currents of linguistics. The full list of the papers presented at the 1973 Conference is given below. Those papers which have been submitted and accepted for inclusion in *AAL*, like the present one, are being published within the framework of the journal.

A. Semitic and its Afroasiatic Cousins

1. Carleton T. Hodge (University of Indiana), *The Nominal Sentence in Semitic* (=AAL 2/4).
2. G. Janssens (University of Ghent, Belgium), *The Semitic Verbal System* (=AAL 2/4).
3. J. B. Callender (UCLA), *Afroasiatic Cases and the Formation of Ancient Egyptian Verbal Constructions with Possessive Suffixes* (=AAL 2/6).
4. Russell G. Schuh (UCLA), *The Chadic Verbal System and its Afroasiatic Nature* (forthcoming in *AAL*).
5. Andrzej Zaborski (University of Cracow, Poland), *The Semitic External Plural in an Afroasiatic Perspective* (forthcoming in *AAL*).

B. Ancient Semitic Languages

6. Giorgio Buccellati (UCLA), *On the Akkadian "Attributive" Genitive* (forthcoming in *AAL*).
7. Daniel Ronnie Cohen (Columbia University), *Subject and Object in Biblical Aramaic: A Functional Approach Based on Form-Content Analysis* (=AAL 2/1).
8. Richard Steiner (Touro College, N.Y.), *Evidence from a Conditioned Sound Change for Lateral d in Pre-Aramaic*.
9. Stanislav Segert (UCLA), *Verbal Categories of Some Northwest Semitic Languages: A Didactical Approach* (=AAL 2/5).
10. Charles Krahmalkov (University of Michigan), *On the Noun with Heavy Suffixes in Punic*.

C. Hebrew

11. Joseph L. Malone (Barnard College--Columbia University), *Systematic vs. Autonomous Phonemics and the Hebrew Grapheme "dagsh"* (=AAL 2/7).
12. Allan D. Corré (University of Wisconsin, Milwaukee), *"Wāw" and "Digamma"* (forthcoming in *AAL*).
13. Harvey Minkoff (Hunter College, N.Y.), *A Feature Analysis of the Development of Hebrew Cursive Scripts* (=AAL 1/7).
14. Raphael Nir (Hebrew University, Jerusalem), *The Survival of Obsolete Hebrew Words in Idiomatic Expressions* (=AAL 2/3).
15. Talmy Givón (UCLA), *On the Role of Perceptual Cues in Hebrew Relativization* (=AAL 2/8).
16. Alan C. Harris (UCLA), *The Relativization "which that is" in Israeli Hebrew*.

D. Arabic

17. Ariel A. Bloch (University of California, Berkeley), *Direct and Indirect Relative Clauses in Arabic*.
18. Frederic J. Cadora (Ohio State University), *Some Features of the Development of Telescoped Words in Arabic Dialects and the Status of Koiné II*.

E. Ethiopian

19. Gene B. Gragg (University of Chicago), *Morpheme Structure Conditions and Underlying Form in Amharic* (forthcoming in *AAL*).
20. C. Douglas Johnson (University of California, Santa Barbara), *Phonological Channels in Chaha* (=AAL 2/2).
21. Robert Hetzron (University of California, Santa Barbara), *The t-Converb in Western Gurage and the Role of Analogy in Historical Morphology* (=AAL 2/2).

F. Beyond Afroasiatic

22. Gilbert B. Davidowitz (New York), *Cognate Afroasiatic and Indo-European Affixes: Conjunctive Person-Markers*.

SECOND NORTH-AMERICAN CONFERENCE ON SEMITIC LINGUISTICS

***Santa Barbara, California
March 25-26, 1974***

The second North-American Conference on Semitic Linguistics was held in Santa Barbara, in conjunction with the annual meeting of the American Oriental Society, on March 25-26, 1974. It was organized by Gene Gragg (University of Chicago), with Robert Hetzron being in charge of local arrangements. The full list of the papers presented at the 1974 Conference is given below; those papers which have been submitted and accepted for inclusion in *AAL*, like the present one, are being published within the framework of the journal.

A. Hebrew

1. Richard Steiner (Touro College, N.Y.), *On the Origin of the heder ~ h^adar Alternation in Hebrew*.
2. Talmy Givón (UCLA), *Verb Complements and Relative Clauses: A Diachronic Case Study in Biblical Hebrew (=AAL 1/4)*.
3. Jack Zeldis (California State University, Fresno), *Bevakaša: A Study of Complementation in Modern Hebrew*.
4. Alan Harris (UCLA), *The Number Two / Collapsing: Two Problems in a Synchronic Description of Modern Hebrew*.

B. Aramaic

5. Yona Sabar (UCLA), *The Impact of Israeli Hebrew on the Neo-Aramaic Dialect of the Jews of Zacho in Israel*.

C. General Semitic

6. Alan Corré (University of Wisconsin, Milwaukee), *The Suprasegmental Feature of Length in Semitic* (forthcoming in *AAL*).

D. Arabic

7. Ariel Bloch (University of California, Berkeley), *Pronoun Externalization in Arabic*.
8. Aharon Barnea (University of California, Berkeley), *Reference to Time, Space and Other Types of Quantification in the City Dialect of Gaza (=AAL 2/3)*.
9. Robert Hetzron (University of California, Santa Barbara), *Origin of Case-Government in Arabic Numerals*.

E. Ethiopic

10. Gene Gragg (University of Chicago), *Remarks on the Development of the Broken Plural System in Northern Ethiopic Semitic*.

AFROASIATIC LINGUISTICS

Volume One

1. P. Newman and R. G. Schuh, *The Hausa Aspect System*, 38 pp.
2. J. L. Malone, *The Development of the Anomalous Syriac Verb eškāh 'To Find': A Case of Convergent Factors in Linguistic Change*, 10 pp.
3. R. Hetzron, *Extrinsic Ordering in Classical Arabic*, 25 pp.
4. T. Givón, *Verb Complements and Relative Clauses: A Diachronic Case Study in Biblical Hebrew*, 22 pp.
5. T. M. Johnstone, *The Modern South Arabian Languages*, 29 pp.
6. B. W. Andrzejewski, *Indicator Particles in Somali*, 69 pp.
7. H. Minkoff, *Graphemics and Diachrony: Some Evidence from Hebrew Cursive*, 16 pp.

Volume Two

1. D. R. Cohen, *Subject and Object in Biblical Aramaic: A Functional Approach Based on Form-Content Analysis*, 23 pp.
2. C. D. Johnson, *Phonological Channels in Chaha*, 13 pp.
R. Hetzron, *The t-Converb in Western Gurage (The Role of Analogy in Historical Morphology)*, 12 pp.
3. A. Barnea, *Reference to Time, Space and Other Types of Quantification in the City Dialect of Gaza*, 10 pp.
R. Nir, *The Survival of Obsolete Hebrew Words in Idiomatic Expressions*, 7 pp.
4. C. T. Hodge, *The Nominal Sentence in Semitic*, 7 pp.
G. Janssens, *The Semitic Verbal Tense System*, 6 pp.
5. S. Segert, *Verbal Categories of some Northwest Semitic Languages: A Didactical Approach*, 12 pp.
6. J. B. Callender, *Afroasiatic Cases and the Formation of Ancient Egyptian Constructions with Possessive Suffixes*, 18 pp.
7. J. L. Malone, *Systematic vs. Autonomous Phonemics and the Hebrew Grapheme Dagesh*, 17 pp.
8. T. Givón, *On the Role of Perceptual Clues in Hebrew Relativization*, 17 pp.
9. A. D. Corré, *Wāw and Digamma*, 7 pp.
Id., *A Suprasegmental Feature of Length in Semitic*, 6 pp.

Descriptive flyers
with complete lists of abstracts,
available on request.

undena publications

bibliotheca mesopotamica

Primary sources and interpretive analyses for the study of Mesopotamian civilization.

Volume 1. *Old Sumerian and Old Akkadian Texts in Philadelphia chiefly from Nippur.*

Part One: Literary and Lexical Texts and the Earliest Administrative Documents from Nippur.

By AAGE WESTENHOLZ. xii-210 pp., 3 plates. \$18.50 (cloth), \$12 (paper).

assur

A journal for the study of Assyrian as a dialect of Akkadian and of Assyria as a special aspect of Mesopotamian civilization.

Editors: K.H. DELLER, P. GARELLI, C. SAPORETTI. Subscription \$12.50.

Volume 1 includes articles by S. Parpola, C. Saporetti, M. Fales, K. Grayson.

afroasiatic linguistics

A journal devoted to theoretical articles using Afroasiatic material, and to descriptive, historical and comparative studies.

Editor: R. HETZRON. Subscription \$12.50.

The first two volumes include articles by P. Newman and R. Schuh, J.L. Malone, B.W. Andrzejewski, T. Givón, T.M. Johnstone, S. Segert, C.T. Hodge, D.R. Cohen, R. Nir, H. Minkoff.

afroasiatic dialects

A series of grammars providing concise descriptions of individual languages within the Afroasiatic family, and directed to scholars and students in the given language areas as well as in linguistics.

Editors: W. LESLAU and T.G. PENCHOEN.

Volume 1 (Berber). *Tamazight of the Ayt Ndhir.*

By T.G. PENCHOEN. 124 pp. \$8.50.

sources and monographs on the ancient near east

Shorter fascicles making available original documents in English translation and important studies by modern scholars in the field of history, religion, literature, art and archaeology of the Ancient Near East.

Editor: G. BUCCELLATI. Subscription \$10.

The first two volumes include fascicles by A. Falkenstein, B. Landsberger, I.M. Diakonoff, F.R. Kraus, R.I. Caplice, M. Cohen

other volumes

Approaches to the Study of the Ancient Near East. A Volume of Studies offered to I.J. Gelb.

A collection of 27 articles on current trends and on the potential of new approaches in linguistic, literary, archaeological and historical fields. Edited by G. BUCCELLATI. 338 pp., 2 pl. (=Orientalia NS, Vol. 42, 1-2). \$12.50.

A Bibliography of Homeric Scholarship. Preliminary Edition 1930-1970.

By DAVID W. PACKARD and TANIA MEYERS. vi-184 pp. \$2.50.

Almost 4000 titles, listed alphabetically with a topical index divided into 16 major categories.

Professional and institutional discount of 20% on single copies (higher on larger orders).

All prices are postpaid. Descriptive flyers and information on desk copies available on request.

Undena Publications, P.O. Box 97, Malibu, California 90265, U.S.A.